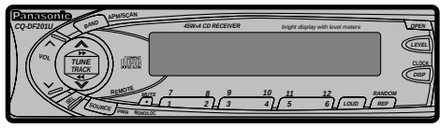
Panasonic®



Removable Full Front High-Power CD Player/ Receiver

Récepteur/lecteur CD à puissance élevée avec panneau avant entièrement amovible

Reproductor CD/receptor de alta potencia con placa frontal completamente removible

CQ-DF201U

Operating Instructions
Manuel d’instructions
Manual de instrucciones

- Please read these instructions carefully before using this product and save this manual for future use.
- Prière de lire ces instructions attentivement avant d’utiliser Ie produit et garder ce manuel pour l’utilisation ultérieure.
- Lea con atención estas instrucciones antes de utilizar el producto y guarde este manual para poderlo consultar en el futuro.

Safety Information

Radio Frequency Interference Statement:

Applies only in U.S.A.

This equipment has been tested and found to comply with the limits for a Class B digital, pursuant to Part 15 of the FCC Rules.

- These limits are designed to provide reasonable protection against harmful interference in an automobile installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio reception, which can be determined by turning the equipment off and on, the user is encouraged to consult the dealer or an experience radio technician for help.

FCC Warning:
Any unauthorized changes or modifications to this equipment would void the user's authority to operate this device.

This device complies with Part 15 of the FCC Rules:
Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

For Canada:
This Class B digital apparatus complies with Canadian ICES-003.

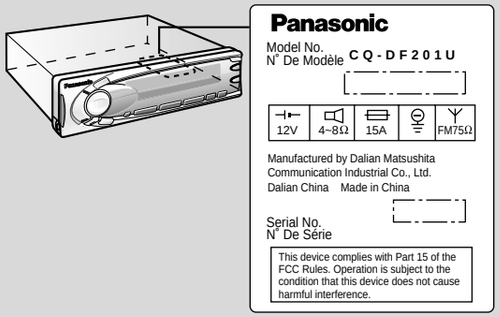
WARNING:
TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS PRODUCT TO RAIN OR MOISTURE.

CAUTION:
THIS PRODUCT IS A CLASS I LASER PRODUCT.
USE OF CONTROLS OR ADJUSTMENTS OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.
DO NOT OPEN COVERS AND DO NOT REPAIR YOURSELF. REFER SERVICING TO QUALIFIED PERSONNEL.

Laser products:
Wave length: 780 nm
Laser power: No hazardous radiation is emitted with safety protection.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, AND ANNOYING INTERFERENCE, USE ONLY THE INCLUDED COMPONENTS.

Label Indication and Location


Panasonic
Model No.
N° De Modèle CQ-DF201U
12V
4~8Ω
15A
FM75Ω
Manufactured by Dalian Matsushita Communication Industrial Co., Ltd.
Dalian China Made in China
Serial No.
N° De Série
This device complies with Part 15 of the FCC Rules. Operation is subject to the condition that this device does not cause harmful interference.

Find the model number and serial number on either the back or bottom of the unit. Please record them in the space below and retain this booklet as a permanent record of your purchase to help with identification in case of theft.

MODEL NUMBER	**CQ-DF201U**
SERIAL NUMBER	
DATE PURCHASED	
FROM	

Consignes de sécurité

MISE EN GARDE:
POUR RÉDUIRE LES RISQUES D'INCENDIE OU D'ÉLECTROCUTION, N'EXPOSEZ PAS CET APPAREIL À LA PLUIE OU À L'HUMIDITÉ.

ATTENTION :
CET APPAREIL EST UN PRODUIT LASER DE LA CLASSE I.
L'UTILISATION DE COMMANDES OU RÉGLAGES OU L'EXÉCUTION D'OPÉRATIONS AUTRES QUE CELLES QUI SONT INDIQUÉES DANS CE DOCUMENT PEUVENT RÉSULTER EN UNE EXPOSITION À UN RAYONNEMENT DANGEREUX.
N'OUVREZ PAS LES COUVERCLES ET N'ESSAYEZ PAS D'EFFECTUER VOUS-MÊME DES RÉPARATIONS. ADRESSEZ-VOUS À UN PERSONNEL QUALIFIÉ POUR TOUTE RÉPARATION.

Produits laser:
Longueur d'onde: 780 nm
Puissance du laser: Aucune radiation dangereuse n'est émise avec la protection de sécurité.

AFIN DE PRÉVENIR TOUT RISQUE D'INCENDIE OU D'INTERFÉRENCES, UTILISER UNIQUEMENT LES COMPOSANTS FOURNIS.

Il est recommandé de noter, dans l'espace prévu ci-dessous, les numéros de modèle et de série inscrits soit à l'arrière soit sous le fond de l'appareil, et de conserver ce manuel comme mémorandum de l'achat afin de permettre l'identification de l'appareil en cas de vol.

NUMÉRO DE MODÈLE	**CQ-DF201U**
NUMÉRO DE SÉRIE	
DATE DE L'ACHAT	
VENDEUR	

Información para su seguridad

ADVERTENCIA:
PARA REDUCIR EL RIESGO DE INCENDIOS O SACUDIDAS ELÉCTRICAS, NO EXPONGA ESTE PRODUCTO A LA LLUVIA NI A LA HUMEDAD.

PRECAUCIÓN:
ÉSTE ES UN PRODUCTO LÁSER DE LA CLASE I.
LA UTILIZACIÓN DE CONTROLES, EL HACER AJUSTES O EL SEGUIR PROCEDIMIENTOS DISTINTOS DE LOS ESPECIFICADOS EN ESTE MANUAL PODRÍA CAUSAR UNA EXPOSICIÓN PELIGROSA A LA RADIACIÓN.
NO ABRA LAS CUBIERTAS NI HAGA REPARACIONES USTED MISMO. SOLICITE LOS TRABAJOS DE SERVICIO AL PERSONAL CALIFICADO.

Productos láser:
Longitud de onda: 780 nm
Potencia láser: Con protección de seguridad no se emite radiación peligrosa.

PARA REDUCIR EL RIESGO DE INCENDIOS O SACUDIDAS ELÉCTRICAS, Y PARA EVITAR LAS INTERFERENCIAS MOLESTAS, UTILICE SOLAMENTE LOS COMPONENTES INCLUIDOS.

Busque el número del modelo y el número de serie ya sea en la parte trasera o en el fondo de la unidad. Sírvase anotar dichos números en el espacio siguiente, y mantenga este librete como una anotación permanente de su compra para ayudar en la identificación en el caso de robo.

NÚMERO DEL MODELO	**CQ-DF201U**
NÚMERO DE SERIE	
FACHA DE COMPRA	
NOMBRE DE LA TIENDA	

__Panasonic__ welcomes you to our ever growing family of electronic product owners. We know that this product will bring you many hours of enjoyment. Our reputation is built on precise electronic and mechanical engineering, manufactured with carefully selected components and assembled by people who take pride in their work. Once you discover the quality, reliability, and value we have built into this product, you too will be proud to be a member of our family.

❒ Use this Product Safely

When Driving
Keep the volume level low enough to be aware of road and traffic conditions.

When Car Washing
Do not expose the product, including the speakers and CDs, to water or excessive moisture. This could cause electrical shorts, fire, or other damage.

When Parked
Parking in direct sunlight can produce very high temperatures inside your car. Give the interior a chance to cool down before switching the unit on.

Use the Proper Power Supply
This product is designed to operate with a 12 volt, negative ground battery system (the normal system in a North American car).

Disc Mechanism
Do not insert coins or any small objects. Keep screwdrivers and other metallic objects away from the disc mechanism and disc.

Use Authorized Servicenters
Do not attempt to disassemble or adjust this precision product. Please refer to the Servicenter list including with this product for service assistance.

For Installation
This product should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.

❒ Components

- Operating instructions 1
- Installation hardware.....1 set (➡ page 18)
- Power connector 1
- Remote control unit 1
- Lithium battery (CR2025)..... 1
- Warranty card..... 1

__Panasonic__ est heureuse de vous compter parmi les utilisateurs de ses appareils électroniques. Nous pouvons vous assurer que cet appareil vous procurera de longues heures d'agrément. Notre réputation est fondée sur une ingénierie électronique et mécanique de haute précision, laquelle préside à la fabrication d'appareils ne comportant que des composants de choix assemblés par un personnel soucieux de la bonne réputation acquise par la qualité de son travail. Après avoir découvert la qualité, la valeur et la fiabilité de cet appareil, vous aussi serez fier d'être un client __Panasonic__.

❒ Précautions à prendre

Au volant
Réglez le volume à un niveau qui ne risque pas de masquer les bruits ambiants.

Lavage de la voiture
Afin de prévenir tout risque de court-circuit ou d'incendie, n'exposez pas l'équipement, y compris les haut-parleurs et les disques, à l'eau ou à une humidité excessive.

Voiture stationnée
L'habitacle d'une voiture immobile exposée au soleil toutes vitres fermées devient rapidement très chaud. Laisser rafraîchir l'intérieur du véhicule avant d'utiliser l'appareil.

Source d'alimentation
Cet appareil est conçu pour fonctionner sur un système d'alimentation avec batterie de 12 V à masse négative (système standard sur les voitures de construction nord-américaine).

Mécanisme de disque
N'insérez pas de pièces de monnaie ou de petits objets. Gardez les tournevis et autres objets métalliques à l'écart du mécanisme de disque et du disque.

Réparation
Ne tentez pas de démonter ou d'ajuster l'appareil vous-même. Veuillez vous référer à la liste des centres de service fournie avec cet appareil pour contacter le service d'assistance.

Installation
L'apppareil doit être installé en position horizontale avec son extrémité avant inclinée vers le haut à un angle commode, mais ne dépassant pas 30°.

❒ Éléments constitutifs

- Manuel d'instructions..... 1
- Quincaillerie pour l'installation .....1 ensemble (➡ page 38)
- Connecteur d'alimentation 1
- Télécommande..... 1
- Pile au lithium (CR2025) 1
- Carte de garantie 1

ESPAÑOL

__Panasonic__ le da la bienvenida a la familia constantemente en aumento de poseedores de productos electrónicos. Nos esforzamos en proporcionarle las ventajas de la ingeniería mecánica y electrónica de precisión, de una fabricación con componentes cuidadosamente seleccionados, y de un montaje realizado por personas orgullosas de la reputación que su trabajo ha cimentado para nuestra empresa. Estamos seguros de que este producto le proporcionará muchas horas de distracción y, una vez comprobada la calidad, el valor y la fiabilidad incorporados, usted también se sentirá orgulloso de pertenecer a nuestra familia.

❒ Uso de este equipo con seguridad

Cuando conduzca
Mantenga el nivel del volumen suficientemente bajo para estar atento a la carretera y a las condiciones del tráfico.

Cuando lave el automóvil
No exponga el equipo, incluyendo los altavoces y los CDs, al agua o a una humedad excesiva. Esto puede causar cortocircuitos eléctricos, incendios u otros daños.

Cuando esté estacionado
El estacionamiento a la luz solar directa puede producir temperaturas muy altas en el interior de su vehículo. Procure enfriar el interior antes de encender la unidad.

Uso de la alimentación apropiada
Este equipo ha sido diseñado para funcionar con un sistema de batería de 12 voltios con negativo a masa (el sistema normal en un vehículo norteamericano).

Mecanismo de disco
No inserte monedas ni ningún objeto pequeño. Mantenga los destornilladores u otros objetos metálicos apartados del mecanismo de disco y del disco.

Uso de los centros de servicio autorizados
No intente desmontar ni ajustar este equipo de precisión. Consulte la lista de centros de servicio incluidos con este producto para acudir a ellos cuando sea necesario.

Instalación
La unidad deberá instalarse en posición horizontal, con el extremo delantero hacia arriba formando un ángulo conveniente, pero con no más de 30°.

❒ Componentes

- Manual de instrucciones..... 1
- Accesorios suministrados .....1 juego (➡ página 58)
- Conector de alimentación..... 1
- Unidad del controlador remoto..... 1
- Pila de litio (CR2025) 1
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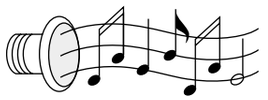
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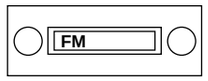

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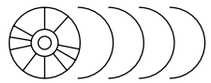

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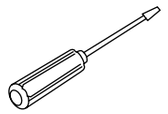

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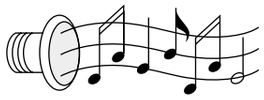
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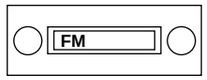

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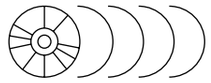

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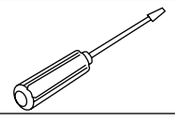

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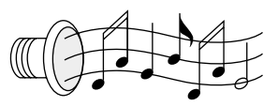
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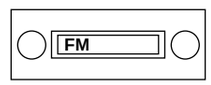

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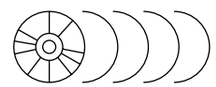

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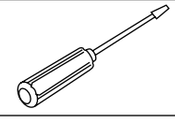

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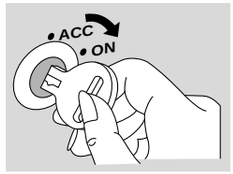
Power and Sound Controls

Power

Turn the key in the ignition until the accessory indicator lights.
Power on: Press **[SOURCE]** (PWR).
Power off: Press **[SOURCE]** (PWR) again **and hold.**



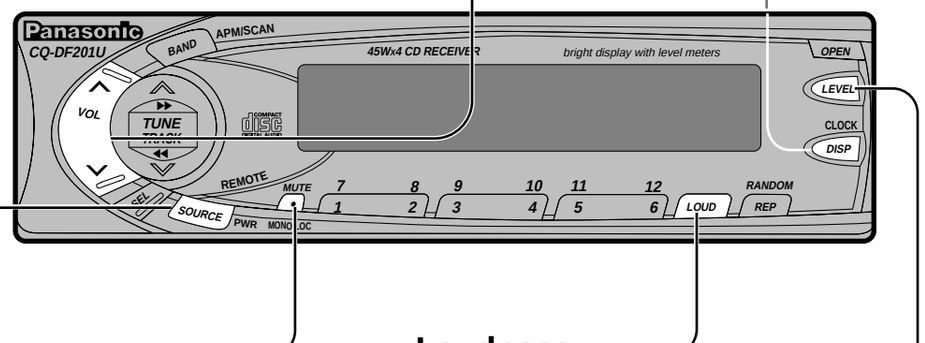
Note:

- When the power is switched on for the first time, a demonstration message appears on the display.
  To cancel this display, press [DISP].

Volume

[∧ VOL]: Up
[∨ VOL]: Down
Press and hold for rapid adjustment.

Volume level
(0 to 40)



Mute

Press **[•]** (MUTE) to mute the sound completely.

Press **[•]** (MUTE) again to cancel.

Anti-volume-blast circuit:
When the power is switched off and on again, the volume slowly rises to the previous level.
The anti-volume-blast circuit will not work when the volume level is set lower than position 20 on the display.

Loudness

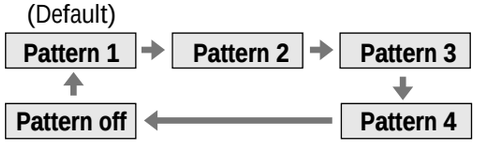
Press **[LOUD]** to enhance bass and treble tones at low or medium volume.

Press **[LOUD]** again to cancel.

Level Meter

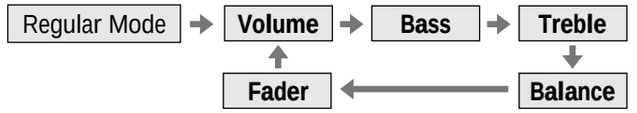
When the power is on, the level of sound sources, such as radio and CD, is displayed.
Press **[LEVEL]** to change the level meter display.

(Default)



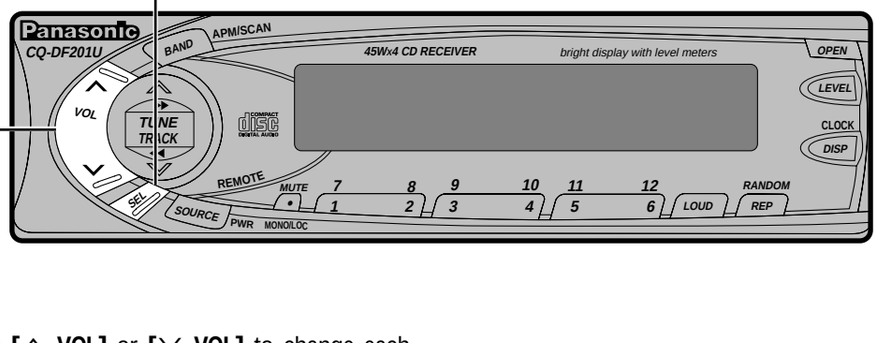
Audio Mode (Bass/Treble/Balance/Fader)

① Press **[SEL]** to select the audio mode.



Note:

- If no operation takes place for more than 5 seconds in audio mode (2 seconds in volume mode), the display return to the regular mode.



② Press **[∧ VOL]** or **[∨ VOL]** to change each level.

Bass mode:

Adjustable range: −12 dB to +12 dB

Treble mode:

Adjustable range: −12 dB to +12 dB

Balance mode:

R (right speaker) or L (left speaker)

Adjustable range: 1 to 15 Balance center

Fader mode:

F (front speaker) or R (rear speaker)

Adjustable range: 1 to 15 Fader center

Radio Basics

1 Mode Selection

Press **[SOURCE]** to change to the radio mode.

Source

Radio → CD player

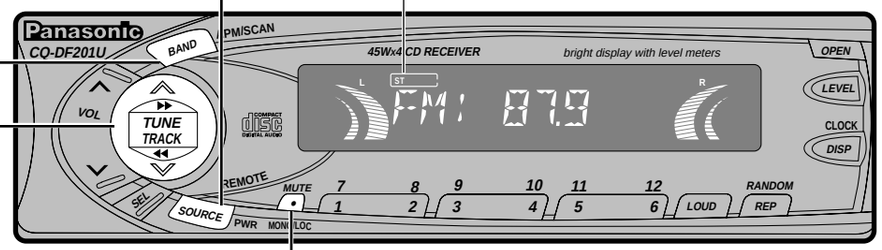
(When a CD is inserted.)

2 Band

Press **[BAND]** to change the band.

FM1 → FM2 → FM3 → AM → FM1

FM stereo indicator



3 Manual Tuning

[∧ TUNE]: Higher frequency
[∨ TUNE]: Lower frequency

Seek Tuning

Press and hold ...
[∧ TUNE]: Higher frequency
[∨ TUNE]: Lower frequency
Tuning will automatically stop when the signals of the next broadcast station are received.

4 Mono/Local Selection

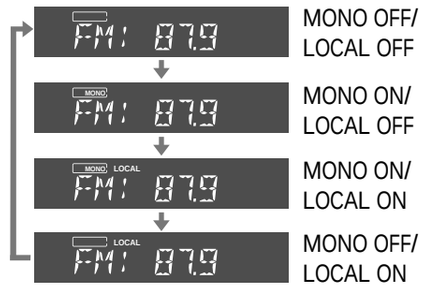
MONO: Noise is significantly decreased when weak signals are received from an FM broadcast station.

LOCAL: Only strong signals of stations are searched in seek tuning, while at the LOCAL OFF setting, relatively weak signals are also searched.

FM broadcasts:
Press and hold **[•]** (MONO/LOC) to change the mode. Release when at the desired point.

AM broadcasts:
Press and hold **[•]** (MONO/LOC) to switch LOCAL mode on and off.

FM broadcast:



AM broadcast:

Preset Station Setting

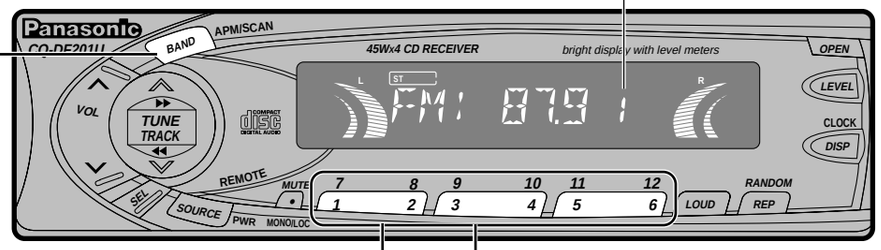
Up to 6 stations each can be saved in the FM1, FM2, FM3 and AM preset station memories.

Caution:
- To ensure safety, never attempt to preset stations while you are driving.

1 Band

Press **[BAND]** to select a desired band.
(➡ page 12)

Preset number



2 Auto Station Preset

Press and hold **[BAND]** (APM) for more than 2 seconds (auto preset memory).
- The 6 strongest available stations will be automatically saved in the memory under preset buttons **[1]** to **[6]**.
- Once set, the preset stations are sequentially scanned for 5 seconds each.

Note:
- The stations manually preset on the selected band will be deleted.

Manual Station Preset

1. Use manual or seek tuning to find a station. (➡ page 12)
2. Press and hold one of the preset buttons **[1]** to **[6]** until the display blinks once.

3 Tuning in a Preset Station

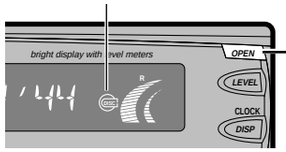
Press the corresponding preset button **[1]** to **[6]** to tune in a preset station.

Note:
- You can change the memory presetting by repeating the above procedure.

CD Player Basics

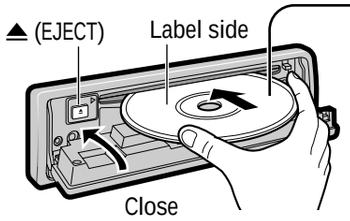
Disc Insert and Playback

Lights when the disc is loaded.



1 Open the front panel

Press **[OPEN]** to open the front panel.



2 Disc insert

Close the front panel manually.
Playback will start automatically.

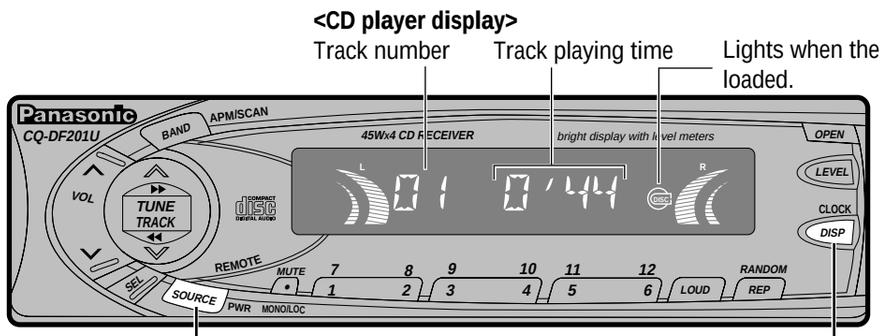
Stop and Disc Eject

Press **[▲]** (EJECT) to stop CD play and eject the disc.

When CD is in the player
Press **[SOURCE]** to change to CD play mode.

Listening to a CD

<CD player display>



Mode Selection

Press **[SOURCE]** to change to the CD play mode.

Source

Radio → **CD player**
(When a CD is inserted.)

Display Change

Press **[DISP]** to switch to the clock display.

Track number/
Track playing time

Clock display

Cautions:
- **Only 12 cm CD** is available for this unit.
- This unit is not designed for any 8 cm CD.
- If you insert an 8 cm CD and can not eject it, turn ACC of your car off once and turn it on again, then press **[▲]** (EJECT).

Track Selection

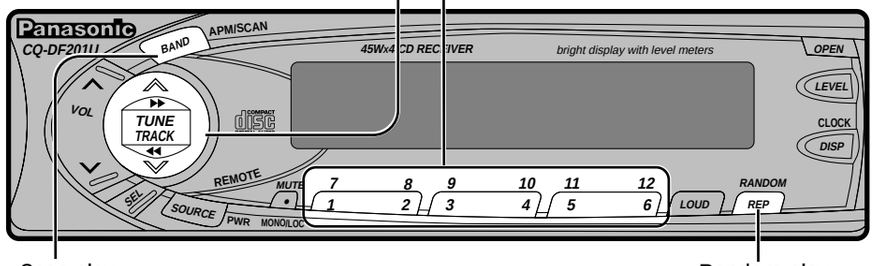
[▶▶TRACK]: Advance to the next track.
[◀◀TRACK]: Back to beginning of the current track.
Back to previous track. (Press twice.)

Track Search

Press and hold ...
[▶▶TRACK]: Fast forward
[◀◀TRACK]: Fast backward
Release to resume the regular CD play.

Direct Track Selection

- Press a track number button from **[1]** to **[6]**.
  The corresponding track starts playing.
- Press and hold a track number button from **[7]** to **[12]** (**[1]** to **[6]**) for more than 1 second.
  The corresponding track starts playing.



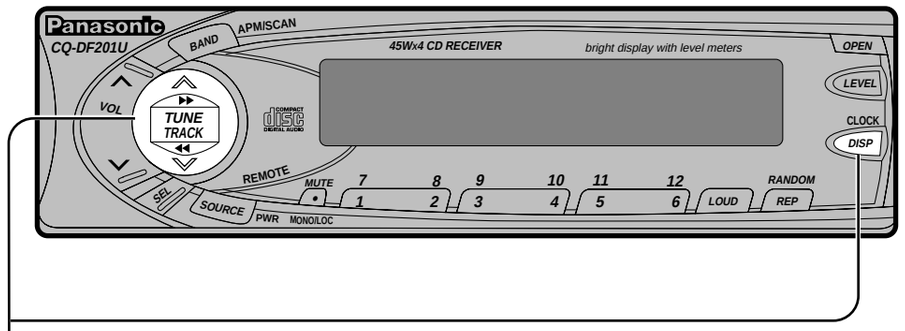
Scan play

Random play
Repeat play

Track random play	• Press and hold **[REP]** (RANDOM) for more than 2 seconds. All the tracks are played in random order. • Press and hold **[REP]** (RANDOM) again to cancel.	
Track scan play	• Press **[BAND]** (SCAN). The first 10 seconds of each track on the disc are played in sequence. • Press **[BAND]** (SCAN) again to cancel.	
Track repeat play	• Press **[REP]**. The current track is repeated. • Press **[REP]** again to cancel.	

Clock Basics

The 12-hour system is used for the clock.



Initial Time

❶ Press **[DISP]** (CLOCK).

Hours

❷ Press and hold **[DISP]** (CLOCK).

(Hour blinks.)

❸ Press **[∨ TUNE]** or **[∧ TUNE]**.

(Hour sets.)

Minutes

❹ Press **[DISP]** (CLOCK).

(Minutes blink.)

❺ Press **[∨ TUNE]** or **[∧ TUNE]**.

(Minutes set.)

❻ Press **[DISP]** (CLOCK).

(End.)

Note:

- Press and hold **[∨ TUNE]** or **[∧ TUNE]** to change numbers rapidly.

Clock Display

Press **[DISP]** (CLOCK) to switch to the clock display.

In tuner mode:

Broadcast station ↔ Clock display

In CD player mode:

Playing time ↔ Clock display

When the power is off:

Clock display ↔ No display

Note:

- The **[DISP]** (CLOCK) button will not work while the CD player is set to the scan play mode. Cancel the scan play mode before pressing **[DISP]** (CLOCK).

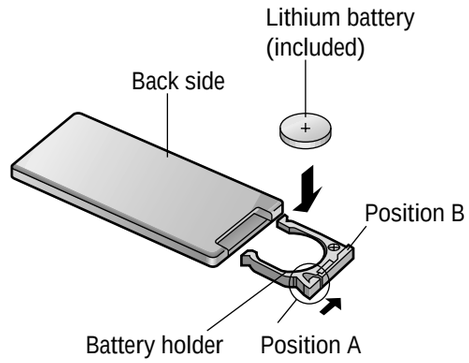
Time Reset

Press and hold **[DISP]** (CLOCK) for more than 2 seconds to activate the time setting mode to reset the time.
Then, repeat steps ❸ to ❻.

Remote Control Unit Preparation

Battery Installation

❶ Remove the battery holder.
Pull the holder by the position B while pushing position A in the direction indicated by the arrow.
❷ Install the battery on the battery holder.
Set a new battery properly with its (+) side facing up as shown in the figure.
❸ Insert the battery holder.
Push in the battery holder back into its original position.



Battery Notes

Remove and dispose of an old battery immediately.
Battery Information:

- Battery type: Panasonic lithium battery (CR2025) (included)
- Battery life: Approximately 6 months with normal use (at room temperature)

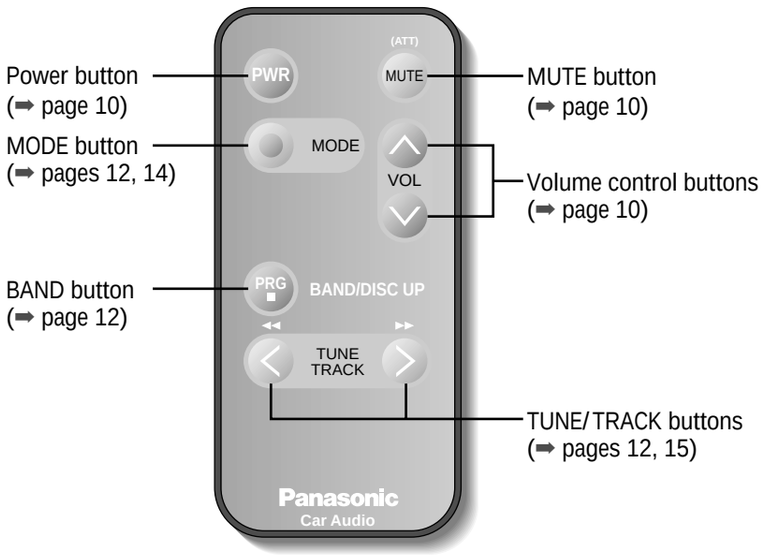
Caution:

- Improper use of batteries may cause overheating, an explosion or ignition, resulting in injury or a fire. Battery leakage may damage the unit.

- Do not disassemble or short the battery. Do not throw a battery into a fire.
- Keep batteries away from children to avoid the risk of accidents.
- Be careful to the local disposal rules when you dispose of batteries.

Main Controls

Buttons of the remote control function in the same way as the controls on the main unit of the reference page.



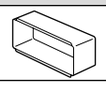
Installation Guide

WARNING

This installation information is designed for experienced installers and is not intended for non-technical individuals. It does not contain warnings or cautions of potential dangers involved in attempting to install this product.

Any attempt to install this product in a motor car by anyone other than qualified installer could cause damage to the electrical system and could result in serious personal injury or death.

❒ Installation Hardware

No.	Item	Diagram	Q'ty
①	Mounting collar		1
②	Hex. nut (5 mmϕ)		1
③	Rear support strap		1
④	Tapping screw (5 mmϕ × 16 mm)		1
⑤	Mounting bolt (5 mmϕ)		1
⑥	Power connector		1
⑦	Removable face plate case		1
⑧	Trim plate		1

❒ Overview

This product should be installed by a professional. However, if you plan to install this product yourself, your first step is to decide where to install it. The instructions in these pages will guide you through the remaining steps:
(Please refer to the "WARNING" statement above.)

- Identify and label the car wires.
- Connect the car wires to the wires of the power connector.
- Install the unit in the dashboard.
- Check the operation of the unit.

If you encounter problems, please consult your nearest professional installer.

Caution: This unit operates with a 12 volt DC negative ground auto battery system only. Do not attempt to use it in any other system. Doing so could cause serious damage.

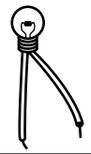
Before you begin installation, look for the items which are packed with your unit.

- **Warranty Card**…Fill this out promptly.
- **Panasonic Servicenter for Service Directory** …Keep for future reference in case the product needs servicing.
- **Installation Hardware**…Needed for in-dash installation.

❒ Required Tools

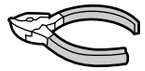
You'll need a screwdriver, a 1.5 volt AA battery, and the following:

12 V DC Test bulb

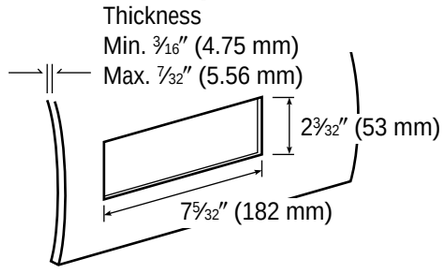


Electrical tape

Side-cut pliers



❒ Dashboard Specifications

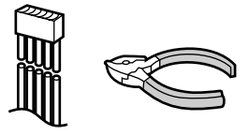


❒ Identify All Leads

The first step in installation is to identify all the car wires you'll use when hooking up your sound system.
As you identify each wire, we suggest that you label it using masking tape and a permanent marker. This will help avoid confusion when making connections later.

Note: Do not connect the power connector to the stereo unit until you have made all connections. If there are no plastic caps on the stereo hooking wires, insulate all exposed leads with electrical tape until you are ready to use them. Identify the leads in the following order.

Power Lead
If your car has a radio or is pre-wired for one:
Cut the connector wires one at a time from the plug (leaving the leads as long as possible) so that you can work with individual leads.



Turn the ignition on to the accessory position, and ground one lead of the test bulb to the chassis.

Touch the other lead of the test bulb to each of the exposed wires from the cut radio connector plug. Touch one wire at a time until you find the outlet that causes the test bulb to light.

Now turn the ignition off and then on. If the bulb also turns off and on, that outlet is the car power lead.

If your car is not wired for an audio unit:
Go to the fuse block and find the fuse port for radio (RADIO), accessory (ACC), or ignition (IGN).

Battery Lead
If your stereo unit has a yellow lead, you will need to locate the car's battery lead. Otherwise you may ignore this procedure. (The yellow battery lead provides continuous power to maintain a clock, memory storage, or other function.)

If your car has a radio or is pre-wired for one:
With the ignition and headlights off, identify the car battery lead by grounding one lead of the test bulb to the chassis and checking the remaining exposed wires from the cut radio connector plug.

f your car is not wired for an audio unit:
Go to the fuse block and find the fuse port for the battery, usually marked BAT.

Speakers
Identify the car speaker leads. There are two leads for each speaker which are usually color coded.
A handy way to identify the speaker leads and the speaker they are connected with is to test the leads using a 1.5 volt AA battery as follows.
Hold one lead against one pole of the battery and stroke the other lead across the other pole. You will hear a scraping sound in one of the speakers if you are holding a speaker lead.
If not, keep testing different lead combinations until you have located all the speaker leads. When you label them, include the speaker location for each.

Antenna Motor
If your car is equipped with an automatic power antenna, identify the car motor antenna lead by connecting one bulb tester lead to the car battery lead and touching the remaining exposed wires from the cut radio connector plug one at a time. You will hear the antenna motor activate when you touch the correct wire.

Antenna
The antenna lead is a thick, black wire with a metal plug at the end.

❒ Connect All Leads

Now that you have identified all the wires in the car, you are ready to begin connecting them to the stereo unit wires. The wiring diagram (➡ page 24) shows the proper connections and color coding of the leads.
We strongly recommend that you test the unit before making a final installation.
You can set the unit on the floor and make temporary connections to test the unit. Use electrical tape to cover all exposed wires.

Important: Connect the red power lead last, after you have made and insulated all other connections.

Ground
Connect the black ground lead of the power connector to the metal car chassis.

Installation Guide (Continued)

Speakers
Connect the speaker wires. See the connection diagram (➡ page 24) for the proper hookups. Follow the diagram carefully to avoid damaging the speakers and the stereo unit.
The speakers used must be able to handle more than 45 watts of audio power. If using an optional audio amplifier, the speakers should be able to handle the maximum amplifier output power. Speakers with low input ratings can be damaged. Speaker impedance should measure 4–8 ohms, which is typically marked on most speakers. Lower or higher impedance speakers will affect output and can cause both speaker and stereo unit damage.

Motor Antenna
Connect the car motor antenna lead to the dark blue motor antenna relay control lead.

Battery
Connect the yellow battery lead to the correct radio wire or to the battery fuse port on the fuse block.

Antenna
Connect the antenna by plugging the antenna lead into the antenna receptacle.

Equipment
Connect any optional equipment such as an amplifier, according to the instructions furnished with the equipment. Leave about 12 inches (30 cm) of distance between the speaker leads/amplifier unit and the antenna/antenna extension cord. Read the operating and installation instructions of any equipment you will connect to this unit.

Power
Connect the red power lead to the correct car radio wire or to the appropriate fuse port on the fuse block.
If the stereo unit functions properly with all these connections made, disconnect the wires and proceed to the final installation.

❒ Final Installation

Lead Connections
Connect all wires, making sure that each connection is insulated and secure. Bundle all loose wires and fasten them with tape so they will not fall down later. Now insert the stereo unit into the mounting collar.
Congratulations! After making a few final checks, you're ready to enjoy your new auto stereo system.

❒ Final Checks

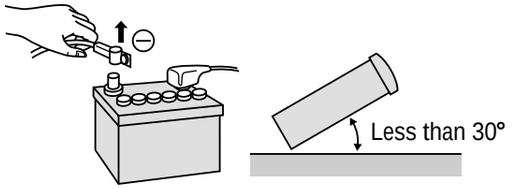
1. Make sure that all wires are properly connected and insulated.
2. Make sure that the stereo unit is securely held in the mounting collar.
3. Turn on the ignition to check the unit for proper operation.

If you have difficulties, consult your nearest authorized professional installer for assistance.

❒ Preparation

- We strongly recommend that you wear gloves for installation work to protect yourself from injuries.
- When bending the mounting tabs of the mounting collar with a screwdriver, be careful not to injure your hands and fingers.

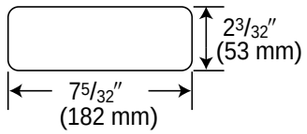
- Disconnect the cable from the negative ⊖ battery terminal (see cautions below).
- Unit should be installed in a horizontal position with the front end up at a convenient angle, but not more than 30°.



Caution:
- Do not disconnect the battery terminals of a car with a trip or navigational computer since all user settings stored in memory will be lost. Instead take extra care with installing the unit to prevent shorts.

Dashboard Installation

Installation Opening

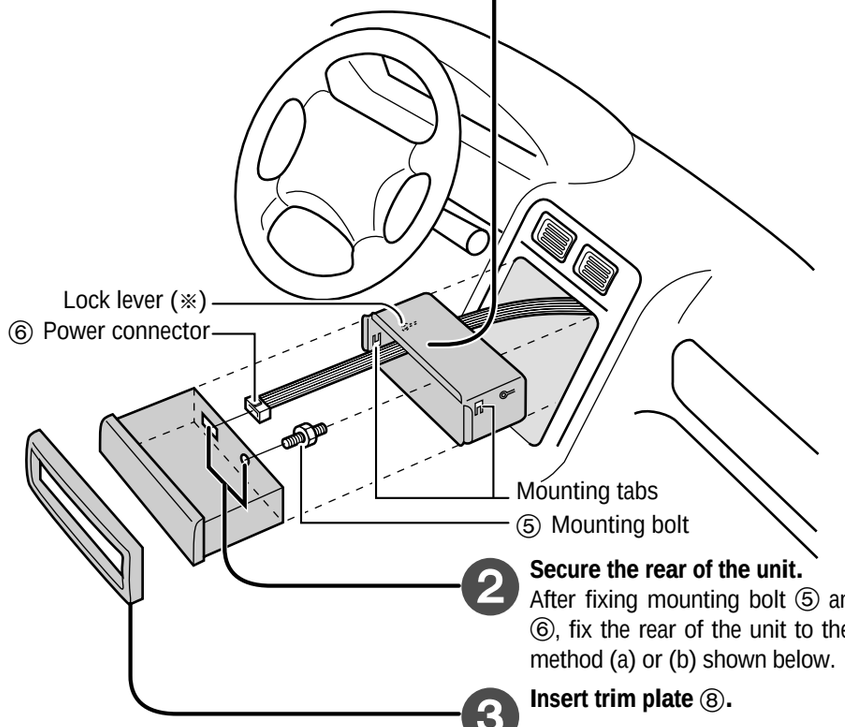


This unit can be installed in any dashboard having an opening as shown above. The dashboard should be 3/16″ (4.75mm)—7/32″ (5.56 mm) thick in order to be able to support the unit.

❒ Installation Procedures

First complete the electrical connections, and then check them for correctness. (➡ page 24)

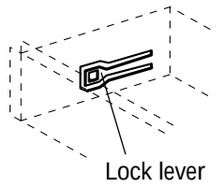
1 Insert mounting collar ① into the dashboard, and bend the mounting tabs out with a screwdriver.



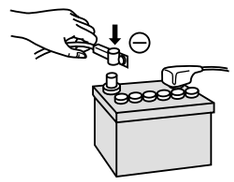
2 Secure the rear of the unit.
After fixing mounting bolt ⑤ and power connector ⑥, fix the rear of the unit to the car body by either method (a) or (b) shown below.

3 Insert trim plate ⑧.

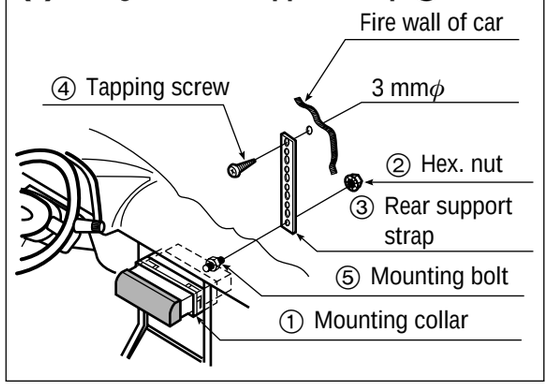
Make sure that the lock lever (※) is flush with the mounting collar ① (not projecting outward).



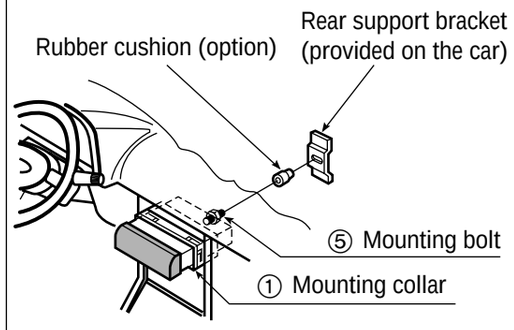
4 After installation, reconnect the negative ⊖ battery terminal.



(a) Using the rear support strap ③



(b) Using the rubber cushion (option)



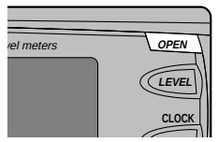
Installation Guide (Continued)

Remove the Unit

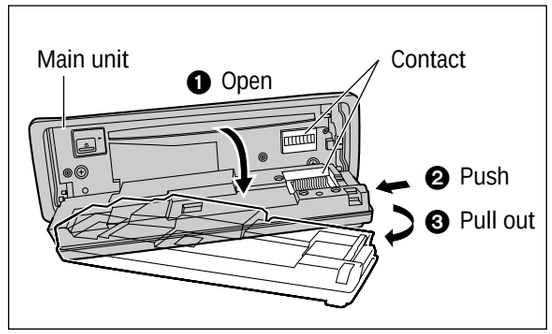
Switch off the power of the unit.

1 **Remove the removable face plate.**

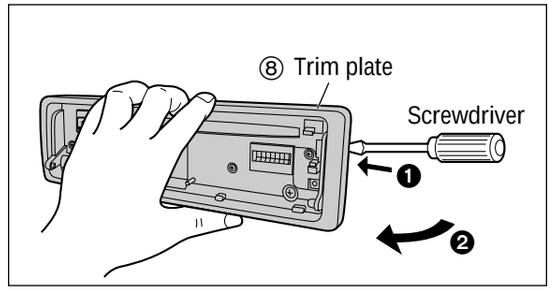
❶ Press **[OPEN]**. The removable face plate will be opened.



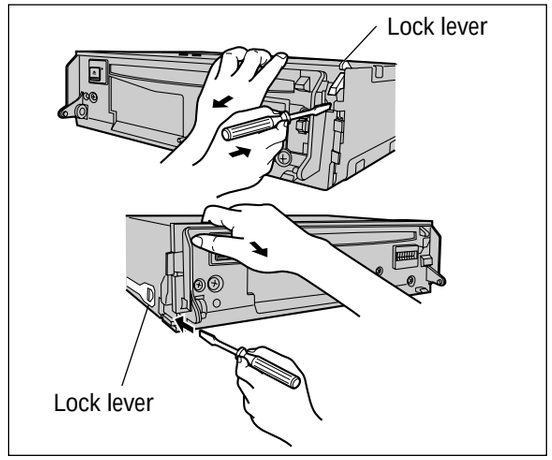
❷ Push the face plate to either the right or left, then pull it out toward you.



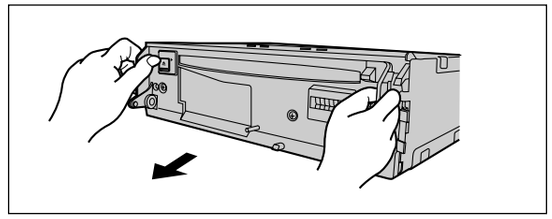
2 **Remove the trim plate ⑧ with a screwdriver.**



3 **Pull out the unit while pushing down the lock lever with a screwdriver.**



4 **Remove the unit pulling with both hands.**

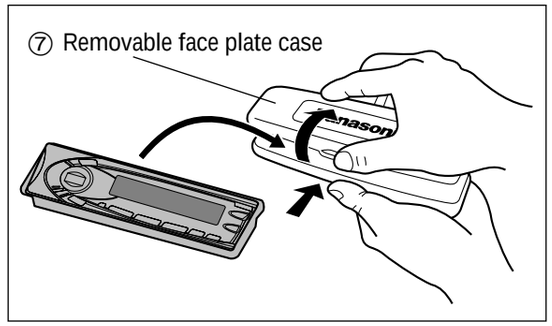


Anti-Theft System

This unit is equipped with a removable face plate. Removing this face plate makes the radio totally inoperable. The security indicator will blink.

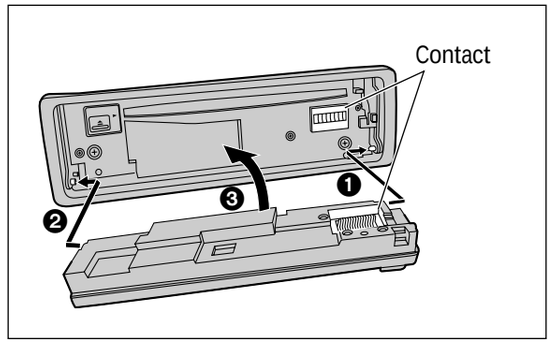
Place the Removable Face Plate into Case

❶ Switch off the power of the unit.
❷ Remove the removable face plate. (➡ page 22)
❸ Gently press the button of the case and open the cover. Place the face plate into the case and take it with you when you leave the car.



Install Removable Face Plate

❶ Fit the face plate with its right or left hole on one of the pins provided on the main unit.
❷ Fit the other hold on the other pin applying slight pressure.
❸ Move the face plate up and down a few times to make sure it is secure. Then close the front panel and press down the right side of the face plate until it clicks into plate.



Security Indicator

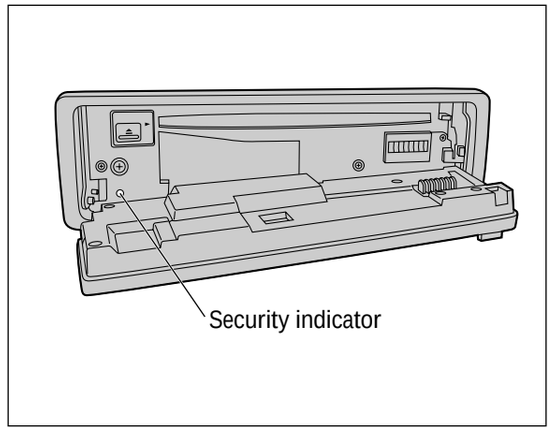
The security indicator blinks when the removable face plate is removed from the unit.

Press and hold **[SEL]** to turn the security indicator on or off. (“LED ON” or “LED OFF”)

LED ON ↔ LED OFF

Default

Display	Security indicator
LED ON	Blinks
LED OFF	OFF



Cautions:
- This face plate is not water-proof. Do not expose it to water or excessive moisture.
- Do not remove the face plate while driving your car.
- Do not place the face plate on the dashboard or nearby areas where the temperature rises to high level.
- Do not touch the contacts on the face plate or on the main unit, since this may result in poor electrical contacts.
- If dirt or other foreign substances get on the contacts, wipe them off with a clean and dry cloth.
- Do not apply a strong downward force onto the face plate and do not put anything on it while it is open, or it might be damaged.

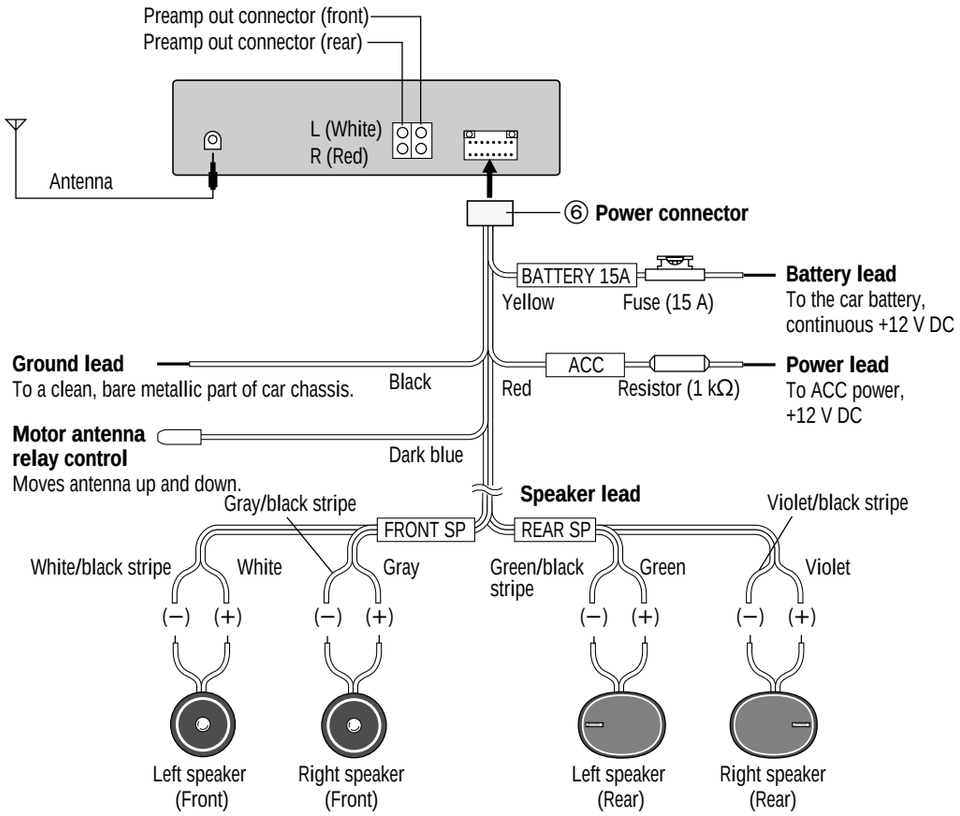
Electrical Connections

Cautions:
- This product is designed to operate of a 12 volt, negative ground battery system.
- To prevent damage to the unit, be sure to follow the connection diagram below.
- Remove approx. ¼″ (5 mm) of protective covering from the ends of the leads before connecting.
- Do not insert the power connector into the unit until the wiring is completed.
- Be sure to insulate any exposed wires from a possible short-circuit from the car chassis. Bundle all cables and keep cable terminals free from touching any metal parts.
- Remember, if your car has a drive computer or a navigation computer, the data of its memory may be erased when the battery terminals are disconnected.

Supplied hardware

No.	Item	Q'ty
⑥	Power connector	1

❒ Wiring Diagram



Troubleshooting

Preliminary Steps

Check and take steps as described in the tables below.

If You Suspect Something Wrong

Immediately switch power off.
Disconnect the power connector and check that there is neither smoke nor heat from the unit before asking for repairs. Never try to repair the unit yourself because it is dangerous to do so.

Cautions:
- Do not use the unit if it malfunctions or is something wrong.
- Do not use the unit in abnormal condition, for example, without sound, or with smoke or foul smell, can cause ignition or electric shock. Immediately stop using it and call the store where you purchased it.

Troubleshooting Tips

❒ Common

Trouble	Cause/Step
No power.	Car's engine switch is not on. ➡**Turn your car's ignition switch to ACC or ON.**
	Cables are not correctly connected. ➡**Connect cables correctly.**
	Battery cable is not correctly connected. ➡**Connect the battery cable to the terminal that is always live.**
	Accessory cable is not correctly connected. ➡**Connect the accessory cable to your car's ACC source.**
	Grounding wire is not correctly connected. ➡**Connect the grounding wire to a metal part of the car.**
	Fuse is burnt. ➡**Call the store where you purchased the unit, or your nearest service station (see the attached sheet) and ask for fuse replacement.**
No sound.	Mute is set to ON. ➡**Set it to OFF.**
	Cables are not correctly connected. ➡**Connect cables correctly.**
	Condensation (dew) ➡**Wait for a while before use.**

❒ Radio

Trouble	Cause/Step
Much noise in FM stereo and monaural broadcasts.	Station is too far, or signals are too weak. ➡**Select other stations of higher signal level.**
Preset station is reset.	Battery cable is not correctly connected. ➡**Connect the battery cable to the terminal that is always live.**

Troubleshooting (Continued)

❒ CD

Trouble	Cause/Step
CD is inside but no sound.	CD is upside down. ➡**Place CD in the correct direction, and the label side up.**
	CD is dirty. ➡**Clean CD, referring to the section on "Notes on CD".**
CD sound skips, tone quality is low.	CD is dirty. ➡**Clean CD, referring to the section on "Notes on CD".**
Sound skips due to vibration.	Mounting angle is over 30°. ➡**Adjust mounting angle to less than 30°.**
	Instable mounting. ➡**Mount the unit securely with the mounting parts, referring to the section on installation.**
CD is not ejected.	● CD is defective. ● Mechanical trouble. ➡**Press [OPEN] to open the panel and press [⏏] (EJECT). If normal operation is not restored yet, call the store where you purchased the unit or the nearest service station to ask for repairs.**

❒ Sound Setting

Trouble	Cause/Step
No sound from left, right, front or rear speakers.	Left and right balance, or front and rear balance is off on one side. ➡**Adjust balance/fader mode as appropriate.**
	Cables are not correctly connected. ➡**Connect the cables correctly.**
Left and right sounds are reversed in stereo listening.	The right speaker wire is connected to the left speaker and the left speaker wire to the right speaker. ➡**Connect the speaker wires to the correct ones.**

❒ Remote Control

Trouble	Cause/Step
Buttons are invalid for operation.	Battery polarities (+) (−) are reversed. ➡**Insert the batteries correctly.**
	Wrong batteries. ➡**Check the batteries.**
	Batteries have run down. ➡**Replace the batteries.**
	Remote control is in the wrong direction. ➡**Direct the remote control at sensor (REMOTE) on the panel.**

Error Display Messages

❒ CD

Display	Cause/Step
CD --E1--	Disc is dirty, or is upside down. ➡**Press [OPEN] to open the front panel, and then press [⏏] (EJECT) to eject the disc.**
CD --E2--	Disc has scars. ➡**Press [OPEN] to open the front panel, and then press [⏏] (EJECT) to eject the disc.**
CD --E3--	No operation by some cause. ➡**Turn off the car engine (ACC off) and remove the fuse from the battery lead (yellow) for 1 minute. Then reinstall the fuse.**

Maintenance

Your product is designed and manufactured to ensure a minimum of maintenance. Use a soft cloth for routine exterior cleaning. Never use benzine, thinner or other solvents.

Product Servicing

If the suggestions in the charts do not solve the problem, we recommend that you take it to your nearest authorized Panasonic Servicenter. The product should be serviced only by a qualified technician.

Replace the Fuse

Use fuses of the same specified rating (15 amps). Using different substitutes or fuses with higher ratings, or connecting the product directly without a fuse, could cause fire or damage to the stereo unit.
If the replacement fuse fails, contact your nearest Panasonic Servicenter for service.

Maintenance

Care of the Unit

❒ Cleaning this Unit

Use a dry, soft cloth to wipe.

❒ Caution on Cleaning

Never use solvents such as benzine, thinner as they may mar the surface of the unit.

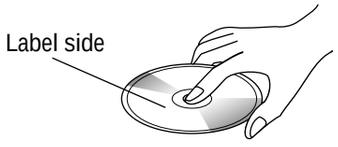
Notes on CD

ONLY USE DISCS CARRYING THE LABEL.

COMPACT disc DIGITAL AUDIO

How to hold the CD

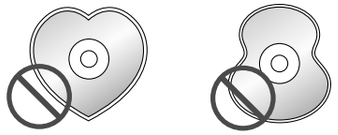
- Do not touch the underside of the disc.
- Do not make scratches on the discs.
- Do not bend disc.
- When not in use, keep CD in the case.



Do not use irregular shaped CDs.

Do not leave discs on the following places:

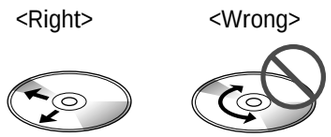
- Direct sunlight
- Near car heaters
- Dirty, dusty and damp areas
- Seats and dashboards



Do not use irregular shaped CDs.

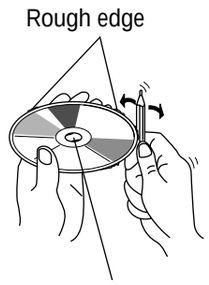
Disc cleaning

Use a dry, soft cloth to wipe from the center outward.



Caution on new discs

A new disc may have rough edges on its inner and outer perimeter. These may cause malfunction.
Remove the rough edges using a pencil, etc.



Specifications

❒ General

Power supply:	12 V DC (11 V—16 V), test voltage 14.4 V, negative ground
Current consumption:	Less than 2.2 A (CD play mode; 0.5 W×4 channels)
Maximum power output:	45 W×4 channels at 400 Hz, Volume control maximum
Tone adjustment range:	
Bass:	±12 dB at 100 Hz
Treble:	±12 dB at 10 kHz
Suitable speaker impedance:	4—8 Ω
Pre-Amp output voltage:	2.0 V (CD play mode; 1 kHz, 0 dB)
Output impedance:	200 Ω
Dimensions (W×H×D):	7″×1 15/16″×5 7/8″ (178×50×150 mm)
Weight:	3 lbs. 1 oz (1.4 kg)

❒ FM Stereo Radio

Frequency range:	87.9 MHz—107.9 MHz
Usable sensitivity:	11.0 dBf. (1.25 µV, 75 Ω)
50 dB quieting sensitivity:	15.2 dBf. (1.6 µV, 75 Ω)
Frequency response:	30 Hz—15 kHz (±3 dB)
Alternate channel selectivity:	75 dB
Stereo separation:	42 dB (1 kHz)
Image response ratio:	75 dB
IF response ratio:	100 dB
Signal/noise ratio:	70 dB

❒ AM Radio

Frequency range:	530 kHz—1710 kHz
Usable sensitivity:	28 dB/µV (25 µV, S/N 20 dB)

❒ CD Player

Sampling frequency:	32 times oversampling
DA converter:	MASH • 1 bit/4 DAC system
Error correction system:	Panasonic super decoding algorithm
Pick-up type:	Astigma 3-beam
Light source:	Semiconductor laser
Wave length:	780 nm
Frequency response:	20 Hz—20 kHz (±1 dB)
Signal/noise ratio:	96 dB
Total harmonic distortion:	0.01 % (1 kHz)
Wow and flutter:	Below measurable limits
Channel separation:	75 dB

Above specifications comply with EIA standards.

Note:

- Specifications and the design are subject to modification without notice due to improvements in technology.

Memorandum

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